

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Implementation of the)	CC Docket No. 96-115
Telecommunications Act of 1996)	
)	
Telecommunications Carriers' Use of)	
Customer Proprietary Network Information)	
and Other Customer Information)	

To: The Commission

COMMENTS OF INTELLIONE INC. IN RESPONSE TO THE CLARIFICATION
ORDER AND SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

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TABLE OF CONTENTS

I. INTRODUCTION.....	4
II. BACKGROUND.....	6
A. An Overview of the Regulatory Framework	7
B. Creating and Using Aggregate Information.....	9
C. Consent to Disclose CPNI.....	13
III. CONCLUSION.....	17

SUMMARY

IntelliOne Technologies provides advanced-intelligence software and data solutions that address traffic growth, traffic avoidance and integration with public safety systems. The Federal Communications Commission (“Commission”) has a unique opportunity in this rulemaking to ensure that its rules for the access, use and disclosure of Customer Proprietary Network Information (“CPNI”) -- particularly location information -- foster rapid deployment of E9-1-1 technology and location-based services.

The Commission should avoid an overly restrictive interpretation of the customer notice and approval requirements for access to, use and disclosure of CPNI for emergency and other public safety and use activities. The Commission should expressly declare that (1) wireless carriers may disclose location information and other CPNI to a third party agent for the purpose of creating aggregate information without express customer consent; (2) wireless carriers may process CPNI themselves to create aggregate information for release to third party application service providers without express customer consent; (3) customer consent, when required by Section 222, to access, use or disclose location information and other CPNI may be obtained directly from the customer by third parties or wireless carriers; and (4) notice of an intended use of CPNI for public safety purposes may be satisfied in any number of ways from a posted privacy policy to ad hoc verbal authorization.

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COMMISSION CLARIFICATION ORDER AND SECOND FURTHER
NOTICE OF PROPOSED RULEMAKING**

I. INTRODUCTION

IntelliOne Technologies provides advanced-intelligence software and data solutions that address traffic growth, traffic avoidance and integration with public safety systems.¹ We submit these comments because the Federal Communications Commission (“Commission”) has a unique opportunity in this rulemaking to ensure that its rules for the access, use and disclosure of Customer Proprietary Network Information (“CPNI”) -- particularly location information -- foster rapid deployment of E9-1-1 technology and location-based services that will bring consumers new benefits while promoting public safety.

Specifically, the Commission seeks comment on how to apply the express prior authorization requirement of Section 222(f) for use of location information. The Commission has analyzed CPNI limitations in the past solely as a privacy and competition issue, but as the Commission seems to now recognize, the Wireless Communications and Public Safety Act of 1999² amended Section 222 “to provide incentives for greater deployment of wireless E911 services.”³

Thus, it is of vital national importance that the Commission avoid an overly restrictive interpretation of the customer approval requirements for access to and disclosure of CPNI for emergency and other public safety and use activities. The Commission should expressly declare that (1) wireless carriers may disclose location information and other CPNI to a third party agent for the purpose of creating aggregate information without express customer consent; (2) wireless carriers may process CPNI themselves to create aggregate information for release to third party application service providers without express customer consent; (3) customer consent, when required by Section 222, to access, use or disclose location information and other CPNI may be obtained directly from the customer

¹ IntelliOne <www.intellione.com> is a privately-held company based in Atlanta, Georgia, and was formed by the merger of AirSage and QuantumLink earlier this year. IntelliOne is a member of the ComCARE Alliance and is a strategic partner of the National Transportation Research Center (NTRC).

² The Wireless Communications and Public Safety Act of 1999, P.L. 106-81, § 2, 113 Stat.1286 (October 26,1999).

³ *In the Matter of Implementation of the Telecommunications Act of 1996: Telecommunications Carriers’ Use of Customer Proprietary Network Information and Other Customer Information; Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended*, Clarification Order and Second Further Notice of Proposed Rulemaking, CC Docket Nos. 96-115 and 96-149 (Rel. Sept. 7, 2001) [“Clarification Order”] at ¶ 22.

by third parties or wireless carriers; and (4) notice of an intended use of CPNI for public safety purposes may be satisfied in any number of ways from a posted privacy policy to ad hoc verbal authorization.

II. BACKGROUND

IntelliOne relies on access to CPNI, aggregate information and registration data from wireless carrier networks to make available valuable public safety information to transportation agencies across the Nation. Of extreme importance is IntelliOne's ability to determine average vehicle velocity and travel time estimates for rural areas of the national highway system where device-based solutions are cost prohibitive and other sources of roadway data are simply not available. Fatal vehicle crashes are much more prevalent in rural areas and mile-for-mile, rural travelers are approximately 2.5 times more likely to be in a fatal crash.⁴

Among other data, IntelliOne relies on originating and terminating cellular tower site sector identifiers in near real time to determine vehicle velocity, direction and travel time between predetermined roadway positions. When combined with geographical information system ("GIS") data and proprietary vehicle routing algorithms, the wireless carrier network data aggregated from CPNI is stripped of any individual characteristics and transformed into roadway

⁴ ITS America State of the ARTS – Advanced Rural Transportation Systems 2001

information critical to transportation agencies for both operational (incident detection and emergency response) and planning (new roadway construction).

Some wireless carriers have expressed reservations in making call detail records or other CPNI available for processing even pursuant to an agreement whereby such information will remain confidential and not be used for any other purpose such as marketing to wireless subscribers.

A. An Overview of the Regulatory Framework

The Telecommunications Act of 1996 imposes a duty on carriers to maintain the confidentiality of CPNI.⁵ A carrier can *use, disclose or permit access* to CPNI with customer approval. A carrier must *disclose* CPNI to any third party upon the written request⁶ of the customer.⁷

There are several apparently limited exceptions to the approval requirement. A carrier may disclose CPNI without approval to initiate, render,

⁵ Section 222(h)(1) defines CPNI as:

(A) information that relates to the quantity, technical configuration, type, destination, location, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier-customer relationship; and

(B) information contained in the bills pertaining to telephone exchange service or telephone toll service received by a customer of a carrier; except that such term does not include subscriber list information.

⁶ By written request, IntelliOne does not understand Congress to be limiting the method of obtaining approval to a written document alone but rather to embrace electronic form. Under the Electronic Signatures in Global and National Commerce Act ("E-Sign Act"), an "electronic signature" is "an electronic sound, symbol or process attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." Pub. L. No. 106-229, 114 Stat. 464 (2000).

⁷ 47 U.S.C. §§ 222(c)(1)&(2).

bill, and collect for telecommunications services; to protect the rights or property of the carrier or others; or to provide inbound telemarketing services to the customer.⁸

The Commission's implementing rule provides: "A telecommunications carrier must obtain customer approval to use, disclose, or permit access to CPNI to market to a customer service to which the customer does not already subscribe to from that carrier."⁹ Thus, it would appear on its face that a carrier could not access, use or disclose customer A's CPNI to market a new service to customer B.¹⁰ The Commission's rules do not address any of the exceptions to the approval requirement.

Subsequent to the Commission's rules, the Wireless Communications and Public Safety Act of 1999 deemed location information derived from a telecommunications service to be CPNI.¹¹ A wireless carrier may *use, disclose or permit access to* location information with the "express prior authorization" of the customer or, without consent, in certain defined emergency circumstances to certain defined individuals or in the operation of an emergency crash notification

⁸ 47 U.S.C. § 222(d)(1)-(3).

⁹ 47 C.F.R. § 64.2007(a).

¹⁰ Section 222(c) may be more limited than the Commission's rules in that it states that CPNI may not be accessed, used or disclosed other than in providing the service from which it was derived or as a necessary incident thereto.

¹¹ The Wireless Communications and Public Safety Act of 1999, P.L. 106-81, § 2, 113 Stat.1286 (October 26,1999).

system.¹² The Commission has not promulgated any rules to implement new Section 222(f) despite calls to do so from industry.¹³

Finally, a carrier may *use* CPNI to create “aggregate” information. Aggregate customer information is defined in Section 222(h)(2) as “collective data that relates to a group or category of services or customers, from which individual customer identities and characteristics have been removed.” A wireless carrier can use, disclose or permit access to aggregate customer information on any terms to any person without customer consent or notice (whereas a local exchange carrier may only do so if it provides such information to others on a reasonable and nondiscriminatory basis).¹⁴ Here again the Commission’s rules are silent on the access, use or disclosure of CPNI to create aggregate information.

B. Creating and Using Aggregate Information

Section 222(c)(3) provides that when a wireless carrier aggregates its individually identifiable customer information, it may use, disclose or permit access to such aggregate customer information for purposes other than those

¹² 47 U.S.C. § 222(d)(4), 222(f)(2).

¹³ See *In the Matter of Petition of the Cellular Telecommunications & Internet Association Petition for a Rulemaking to Establish Fair Location Information Practices*, Notice of Request for Comments, DA –1-696, WT Docket No. 01-72 (Mar. 16, 2001).

¹⁴ Section 222(c)(3) provides: “A telecommunications carrier that receives or obtains customer proprietary network information by virtue of its provision of a telecommunications service may use, disclose, or permit access to aggregate customer information other than for the purposes described in paragraph (1). A local exchange carrier may use, disclose, or permit access to aggregate customer information other than for purposes described in paragraph (1) only if it provides such aggregate information to other carriers or persons on reasonable and nondiscriminatory terms and conditions upon reasonable request therefor.”

permitted under Section 222(c)(1). While not plainly stated in the statute, the Commission has interpreted Section 222(c)(3) to mean that the confidentiality limitations of Section 222(c)(1) are eliminated when individually identifiable characteristics and identities are removed from the information.¹⁵

In other words, when CPNI is transformed into aggregate customer information, wireless carriers are “free to use the aggregate CPNI for whatever purpose they like, including for example, to assist in product development and design, as well as in tracking consumer buying trends, without customer approval.”¹⁶ A corollary to the rule is that a wireless carrier may use aggregate data for its own purposes without ever making the same data available to other carriers or conversely, by making it available to any third party application provider of its choice.

A wireless carrier also is free to define the “group or category of services or customers” to create the profile. That is, the potential categories of useful aggregate information are limited only by human imagination, not by statute or rule.

For example, aggregate data regarding the number of wireless subscribers commuting from one defined geographic area to another using specific roadways

¹⁵ See *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information*, CC Docket No. 96-115, Second Report and Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd 8061, ¶ 143 (1998) [“*CPNI Order*”]. This only makes sense inasmuch as the confidentiality provisions are clearly limited to “individually identifiable” CPNI.

¹⁶ *CPNI Order*, ¶ 149.

at a given hour may be valuable information to a transportation agency seeking to build additional roadways to relieve traffic congestion. Further, the number of wireless subscribers with business or high use service plans traveling the particular roadways may be important information to help determine the impact of mass transit or large area employers' flex time initiatives (as opposed to building new roadways).

Of course, the aggregate information in the examples above may lead to an erroneous conclusion because the aggregate category relates only to those using their cell phone at a particular time and place. But the purchaser of the aggregate information will be the best judge of its value and utility. While a wireless carrier cannot be compelled to provide this sort of data in the first place unless the customer directs disclosure of CPNI to a third party who then creates the aggregate data, the law permits them to do so, and importantly, on a fee basis.¹⁷

Aggregate data may be comprised of information that relates to the quantity, technical configuration, type, destination, location, and amount of use of a telecommunications service, or call location information concerning the user of a commercial mobile service. The data may be derived from any network element or database. For example, a wireless carrier might extract location information from a home location register or call detail records to determine how many customers are traveling north-to-south in the above example. So long as

¹⁷ The Commission has recognized that third parties "pay considerable sums of money" to gather information comparable to aggregate information. *CPNI Order* at ¶ 147 n. 506.

individual customer identities and characteristics have been removed from the data, it is aggregate location information, not CPNI.

A wireless carrier certainly may filter CPNI itself to create aggregate information or it may work with a third party application provider to do so. No regulation governs the method of creation for aggregate information. Indeed, Section 222(d)(1) provides that CPNI may be disclosed to initiate, render, bill or collect for telecommunications services. Carriers often outsource such administrative functions and nothing in Section 222 prevents a carrier from licensing technology or hiring a service to create aggregate data. After all, there must be some process through which individual customer identities and characteristics are removed from the data.

If a wireless carrier does outsource the work to create aggregate information from CPNI, it must, however, ensure the confidentiality of the CPNI. Typically, this would be done through a confidentiality provision in the service agreement that would limit the service provider's use of the CPNI to processing for purposes of creating aggregate information. The same agreement could also license or sell the aggregate data to the service provider for any use.

The Commission needs to consider all of these variables in its rulemaking. It should encourage the use of CPNI to create aggregate data for public safety purposes and to advance the development and deployment of location-based services. The Commission must avoid a blanket rule that, through the laws of

unintended consequences, limits or prevents deployment of services such as those offered by IntelliOne.

C. Consent to Disclose CPNI

Aggregate information certainly is valuable for many applications, but more personalized mobile services and applications may benefit from actual use of CPNI. Nothing prevents a wireless carrier from seeking customer consent today to use, disclose or permit access to CPNI. And nothing prevents a third party service provider or entity from seeking customer consent and providing a carrier with written authorization to do so. However, the consent procedure has been under a litigation cloud for over five years, but the Commission now has an opportunity to clarify the rules.

In its 1998 *CPNI Order*, the Commission determined that Section 222(c)(1) required carriers to notify customers of their CPNI rights and to obtain express written, oral or electronic customer approval before using CPNI to market services outside the customer's existing service relationship with that carrier.¹⁸ This was a “notice and opt-in” approach to CPNI.

U S West and others appealed the *CPNI Order* to the Tenth Circuit.¹⁹ The court concluded that the government did not demonstrate that the CPNI

¹⁸ *CPNI Order*, ¶¶ 86–107; *see also U S WEST, Inc. v. FCC*, 182 F.3d 1224, 1230 (10th Cir. 1999), *cert. denied*, 120 S. Ct. 2215 (Jun. 5, 2000) (No. 99-1427). This approach is distinguished from an “opt-out” or negative option approach “in which approval would be inferred from the customer-carrier relationship unless the customer specifically requested that his or her CPNI be restricted.” *U S WEST*, 182 F.3d at 1230.

regulations requiring opt-in customer approval “directly and materially advanc[ed] its interests in protecting privacy and promoting competition.”²⁰ The Commission now has initiated a further rulemaking to determine whether an opt-in or opt-out approach is required by the statute, but in the interim, the Commission has permitted carriers to use CPNI based on “implicit approval” (through opt-out) after 30-days notice of CPNI rights to customers.²¹

Accordingly, at least for the time being, a wireless carrier may advise customers by mail or other reasonable means that CPNI will be used in a particular manner, provide a means to opt out of such usage, and, after 30-days, use the CPNI of those who failed to respond as planned.

However, if the Commission is too slow in promulgating its final rule or too restrictive in its interpretation, location-based public services such as those offered by IntelliOne will be delayed to the great disadvantage of government and consumer alike. Uncertainty surrounding the Commission’s rules has had a major impact on deployment of services to date and further delay is not warranted.

In this rulemaking thus far, the Commission has limited the discussion to “opt in” or “opt out” forms of consent. IntelliOne views these choices as entirely too limiting and not required by statute. Instead, the point should be that the customer has an opportunity through notice to understand the carrier’s information

¹⁹ *U S WEST*, 182 F.3d at 1240.

²⁰ *U S WEST*, 182 F.3d at 1240.

²¹ *Clarification Order*, ¶ 11.

practices and can manifest his or her consent in a clear way appropriate to the circumstances.

Clearly, for example, consent may be implicit in some circumstances. When a customer asks for traffic alerts to be delivered to his or her wireless device, the government has always viewed the consent as valid.²² Obviously, to deliver the alert, the carrier or its vendor must access and use the caller's location (and have access to the aggregate location information of other users). IntelliOne recognizes, however, that without further consent, the customer's location could not be used or disclosed for other marketing purposes.

IntelliOne believes that some carriers may want to provide traffic alerts either on a fee basis or for free as part of a basic information service offering.²³ The Commission's current rules contemplate a one-time notice to customers regarding a carrier's CPNI practices but do not address what notice would be required upon the introduction of new services.²⁴

IntelliOne urges the Commission to adopt a more simple notice rule requires a carrier to provide notice by effective means whenever new services are

²² See Memorandum Opinion for John C. Keeney, Acting Assistant Attorney General, Criminal Division, from Richard L. Shiffrin, Deputy Assistant Attorney General, Office of Legal Counsel, U.S. Department of Justice, (Sept. 10, 1996)(filed in CC Docket 94-102)("the caller, by dialing 911, has impliedly consented to such disclosure").

²³ The Commission no doubt appreciates that only location information derived from a telecommunications service is CPNI. If a wireless carrier derives location information from the provision of a wireless information or data service such as short messaging or Web browsing, then the CPNI restrictions would not appear to apply at all. The Commission should address this issue in the rulemaking so as not to limit or dissuade carriers from using CPNI as permitted by Section 222.

²⁴ 47 C.F.R. § 64.2007(f).

introduced. And for all cases, the rules should provide that consent be made clear in any form appropriate to the circumstances including written, oral, electronic or other form so long as it evidences the customer's plain desire to participate in the service or transaction. Thus, consent could be obtained through service agreements, online via Web-based subscriptions or "clickwrap" agreements, ad hoc via user signaling on the wireless device, verbally through an IVR or customer service or sales representative, via third party sales agents, or any other means where the customer obtains effective notice of the information practice and has an opportunity to choose not to participate.

For example, a wireless carrier may want to partner with a third party to obtain consent for a location application. Thus, a rental car company and a wireless carrier could agree to permit the rental car company to use CPNI to determine a customer's location, direction and speed. The customer consent could be obtained at the rental car kiosk and provided to the carrier immediately or at a later date.²⁵ The Commission's rules simply cannot contemplate all of the possible arrangements or sales channels for location services. Any detailed rule will have unintended consequences and therefore the Commission should simply require an

²⁵ It is worth noting that any entity could attempt to leverage a wireless carrier's cooperation in a similar business initiative by relying on Section 222's requirement that a carrier disclose CPNI to any third party on the written request of the customer. Of course, Section 222 does not set the terms and conditions or timing for making CPNI available. For applications that would depend on near real time access to CPNI such as location-based services, cooperation with wireless carriers, perhaps through a revenue sharing model, is the preferable approach and the Commission's rules should not preclude such arrangements.

effective means of notice and consent, leaving it to carriers and their customers to find appropriate means of communicating service conditions.

III. CONCLUSION

The creation and use of wireless aggregate information from CPNI has enormous potential. Similarly, there may be incentives available for wireless carriers to seek customer consent to permit disclosure of CPNI to facilitate certain public safety applications. The Commission should ensure that important public safety goals are met consistent with protection of privacy and free speech.

Respectfully submitted,

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